



**PCN # [0470411-PCN]
CXRF-12kW 48V Rectifier
Pwr Mdl, CXRF-HP 48 - 12kW/480, RoHS6**

1. Supplier Information Alpha Technologies, Ltd. 7700 Riverfront Gate, Burnaby, BC V5J 5M4 Canada	1.6 Supplier Contact Info Contact: JD Fraser Product Specialist DC Solution 604-415-7493 jd.fraser@alpha.ca																								
2. Product Change Notification Number PCN # 0470411-PCN	3. Issue Date of Change December 18, 2018																								
4. System Affected Major System Affected: CXRF12 Subsystem Affected: 12kW Firmware and CXC HP Software Hardware Affected: Y Firmware Affected: Y Software Affected: Y																									
5. New Product ID <table border="1" data-bbox="191 1176 771 1428"> <thead> <tr> <th colspan="2">Hardware</th> </tr> <tr> <th>Model</th> <th>Part Number (P/N)</th> </tr> </thead> <tbody> <tr> <td>CXRF 48-12.0kW</td> <td>0100020-001 Rev P</td> </tr> <tr> <th colspan="2">Software / Firmware</th> </tr> <tr> <th>Model</th> <th>Revision</th> </tr> <tr> <td>0350084-002</td> <td>3.00</td> </tr> </tbody> </table>	Hardware		Model	Part Number (P/N)	CXRF 48-12.0kW	0100020-001 Rev P	Software / Firmware		Model	Revision	0350084-002	3.00	6. Old Product ID <table border="1" data-bbox="803 1176 1380 1428"> <thead> <tr> <th colspan="2">Hardware</th> </tr> <tr> <th>Model</th> <th>Part Number (P/N)</th> </tr> </thead> <tbody> <tr> <td>CXRF 48-12.0kW</td> <td>0100020-001 Rev G</td> </tr> <tr> <th colspan="2">Software / Firmware</th> </tr> <tr> <th>Model</th> <th>Revision</th> </tr> <tr> <td>0350084-002</td> <td>2.03</td> </tr> </tbody> </table>	Hardware		Model	Part Number (P/N)	CXRF 48-12.0kW	0100020-001 Rev G	Software / Firmware		Model	Revision	0350084-002	2.03
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7. New CLEI Code PWRAAARFAB	8. Old CLEI Code PWRAAARFAA																								
9. Associated Products or Changes Affected 0350084-002 Firmware File, CXC HP Software 0350090-XXX or 0350091-XXX																									
10. Drawing Number N/A																									
11. Classification of Change A	12. Reason for Classification A design defect that causes higher than the supplier's specified product failure rate.																								



13. Reason for Change <ul style="list-style-type: none">• Hardware and Firmware changes and improvements to increase reliability of CXRF HP 12kW in specific scenarios• Software revision to prevent incompatible firmware being implemented on previous hardware revisions via CXC HP Controller	
14.1 Description of Change <ul style="list-style-type: none">• Improved rectifier robustness during input brown-outs and output load transients• Modified the primary fans to use ceramic bearings to reduce noise and increase life expectancy by reducing additional wear	
14.2 Change Verification Procedures <p>Physically inspect the CXRF 48-12.0kW rectifier for hardware revision number P or greater. Login into the CXC HP controller software revision 5.10 or greater and go to the Modules page to confirm the firmware on the CXRF 48-12.0kW rectifier is 3.00 or greater.</p>	
15. Safety Notification <p>Reliability improvements for rectifier operation</p>	
16. Material Affected <p>N/A</p>	
17. Documentation Affected <p>N/A</p>	
18. Supplier Implementation Date <p>December 18th, 2018</p>	19. Modification Completion Date <p>February 15th 2019</p>
20. Modification Location <p>Burnaby British Columbia</p>	
21. Modification Cost <p>N/A</p>	
22. Location and Quantity of Equipment <p>N/A</p>	
23. Attachments <p>N/A</p>	



24. Comments

- The latest hardware revision P rectifier is compatible with previous hardware revisions within the same system.
- Ensure the CXC HP Controller is updated to version 5.10 or later before installing Revision P rectifiers. CXC HP application software is available at <https://www.alpha.ca/support/support-main-menu/software-firmware-downloads>.